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Filing Date

May 26, 2000

First Named Inventor

Sezan

Art Unit

2623

Examiner Name

Shang, Annan Q.

Attorney Docket Number

7146.0085

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Incomplete Application☐ Reply to Missing Parts
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Date

November 27, 2006

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54,405

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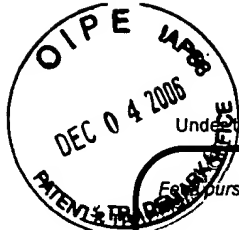
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November 27, 2006

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FEE TRANSMITTAL for FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

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Complete if Known

Application Number	09/580,808
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First Named Inventor	Sezan
Examiner Name	Annan Q. Shang
Art Unit	2623
Attorney Docket No.	7146.0085/SLA0317

METHOD OF PAYMENT (check all that apply)

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Under 37 CFR 1.16 and 1.17

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

	Small Entity Fee (\$)	Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee(\$)	Fee Paid (\$)	Multiple Dependent Claims
_____ -20 or HP= _____	x _____	= _____	_____	Fee (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee(\$)	Fee Paid (\$)
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_____ - 3 or HP= _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____	/ 50 = _____	(round up to a whole number) x _____	= _____	_____

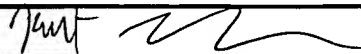
4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Appeal Brief

\$500

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	54,405	Telephone	503-227-5631
Name (Print/Type)	Kurt Rohlf			Date	November 27, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Title : AUDIOVISUAL INFORMATION MANAGEMENT SYSTEM

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This brief comprises these subjects under the headings, and in the order, set forth below:

- I. Real Party in Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Grounds for Rejection to be Reviewed on Appeal
- VII. Argument
- VIII. Conclusion
- IX. Claims Appendix
- X. Evidence Appendix
- XI. Related Proceedings Appendix

The final page of this brief bears the practitioner's signature.

REAL PARTY IN INTEREST

The real party in interest in this appeal is Sharp Laboratories of America, Inc., assignee of the captioned application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN THE APPLICATION

There are 103 claims currently pending in the application.

B. STATUS OF ALL CLAIMS

Claims canceled: 1, 4, 11, 80-88, and 105-107.

Claims withdrawn: None.

Claims pending: 2, 3, 5-10, 12-79, 89-104, and 108-118.

Claims allowed: None.

Claims objected to: None.

Claims rejected: 2, 3, 5-10, 12-79, 89-104, and 108-118.

C. CLAIMS ON APPEAL

Claims 2, 3, 5-10, 12-79, 89-104, and 108-118 are on appeal.

A copy of the claims on appeal is set forth in the Claims Appendix to this Brief.

STATUS OF AMENDMENTS

No amendment was filed after final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter is generally directed to methods and systems that provide at least one of audio, video having a plurality of frames, and pictorial content to a viewer. In a first embodiment, as claimed in independent claim 2, a claimed method may comprise an initial step

of receiving a preferences description that describes the preferences of a user with respect to the use of at least one of the audio, image, and video, where the description includes multiple attributes. *See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15; Claim 2 also includes the step of receiving a media attribute of the preferences description describing the quality of encoding the at least one of an audio, image, and video wherein the quality of encoding includes a first quality and a second quality, and where the first quality is less than the second quality. *Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36. A third claimed step in independent claim 2 is selecting either the first quality and the second quality based upon the type of semantic content of the at least one of said audio and video. *See Id.* at p. 77 line 31 to p. 79 line 3. Finally, claim 2 includes the step of providing to a user the at least one of the audio and video at the selected one of the first quality and the second quality. *See Id.* at p. 77 line 31 to p. 79 line 3; *Id.* at p. 68 line 33 to p. 69 line 31; *see also Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36.

In a second embodiment, as claimed in independent claim 21, a system for use with at least one of a broadcast of an audio and a video comprising a plurality of frames may comprise the elements of the system receiving said broadcast of the at least one of audio and video and including a storage device for the received broadcast of the at least one of audio and video, and the system selectively encoding at one of a plurality of different qualities the received broadcast of the at least one of the audio and video for storage on the storage device based upon the semantic content of said at least one of the audio and video. (Described in the portions of the specification relating to independent claim 2).

In a third embodiment, as claimed in independent claim 31, a claimed method may comprise a first step of providing a preferences description that describe the preferences of a user with respect to the use of the at least one of said audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); a second step of providing a storage attribute of the preferences description for a data storage device of a user's audiovisual system describing first and second qualities of encoding of the at least one of audio and video while the system pauses at least one of listening and viewing of said audio and video (*See Id.* at p. 78 lines 13-22); and a third step of selecting one of the first and second qualities based on the semantic content of the at least one of an audio and a video. *See Id.* at p. 77 line 31 to p. 79 line 3; *Id.* at p. 68 line 33 to p. 69 line 31; *see also Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36.

In a fourth embodiment, as claimed in independent claim 38, a claimed method may comprise a first step of providing a preferences description that describes the preferences of a user with respect to the use of the at least one of the audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second step of providing a storage attribute of the preferences description describing the quality of encoding of the at least one of the audio and video based upon the semantic content of the at least one of audio and video *See Id.* at p. 77 line 31 to p. 79 line 3; *Id.* at p. 68 line 33 to p. 69 line 31; *see also Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36.

In a fifth embodiment, as claimed in independent claim 49, a claimed method may include a first step of providing a preferences description that describes the preferences of a user with respect to the use of the at least one of the audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second step of providing a storage attribute of the preferences description describing the quality of encoding of the at least one of audio and video based upon the semantic content of the audio and a video and upon the combination of at least one other attribute of the preferences description and the storage attribute. *Id.* at p. 78 line 23 to p. 79 line 26.

In a sixth embodiment, as claimed in independent claim 57, a claimed method may include a first step of providing a preferences description that describes the preferences of a user with respect to the use of the at least one of the audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second step of providing a storage attribute of the preferences description describing the quality of encoding of the at least one of audio and video based upon an agent of the system that selects either a first quality and a second quality based upon prior selections of either the first quality or the second quality *Id.* at p. 78 line 23 to p. 79 line 26.

In a seventh embodiment, as claimed in independent claim 61, a claimed storage medium storing information and selectively, detachably insertable into a recording device suitable to record at least one of an audio and a video comprising a plurality of frames (*See Id.* at p. 21 lines 21-24; *Id.* at p. 24 line 35 to p. 25 line 2; *Id.* at p. 58 lines 25-31), comprises a first element of a preferences description, describing preferences of a user with respect to the use of said at least

one of the audio and video, and where said description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second element of a time attribute of the preferences description describing at least one of either (i) a first time to start obtaining said at least one of audio and video prior to the scheduled time of said at least one of audio and video; and (ii) a second time to end obtaining said at least one of audio and video after the schedule time of said at least one of audio and video. *See Id.* at p. 29 line 27 to p. 80 line 11). Furthermore in the claimed storage medium of this seventh embodiment, the storage medium interacts with a recording device into which it is inserted to obtain the at least one of an audio and a video (*See Id.* at p. 21 lines 21-24; *Id.* at p. 24 line 35 to p. 25 line 2; *Id.* at p. 58 lines 25-31).

In an eighth embodiment, as claimed in independent claim 73, a claimed method may comprise a first step of detachably inserting a storage medium into a multimedia device, where the storage medium stores a preferences description describing preferences of a user with respect to the use of the at least one of said audio and video, and where the description includes multiple attributes (*See* previous embodiment with respect to claim 61); and a second step of providing a layer attribute of the preferences description indicating the number of layers of supplemental data auxiliary to the at least one of the audio and video (*See* Specification at p. 80 lines 12-31).

In a ninth embodiment, as claimed in independent claim 89, a claimed method may include a first step of providing a preferences description, that describe the preferences of a user with respect to the use of the at least one of the audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); a second step of providing at least one of: (i) a content attribute of said preferences description related to

the semantic content of said at least one of audio and video (*See Id.* at p. 77 line 31 to p. 79 line 3; *Id.* at p. 68 line 33 to p. 69 line 31; *see also Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36); and (ii) a type attribute of said preferences description related to the type of said at least one of audio and video (*See Id.* at p. 72 line 30 to p. 73 line 23); and a third step of determining the number of layers of supplemental data auxiliary to the at least one of the audio and video based at least in part upon the content attribute and the type attribute (*See Id.* at p. 80 lines 12-31; *See also Id.* at p. 82 line 22 to p. 85 line 18.)

In a tenth embodiment, as claimed in independent claim 94, a claimed method may include a first step of providing a preferences description that describes preferences of a user with respect to the use of the at least one of the audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second step of providing a mode attribute of the preferences description that describes the user's preferences with respect to at least one of: a user-selected forward speed at which the system provides a fast forward presentation of the at least one of audio and video; and (ii) a user-selected reverse speed at which the system provides a fast reverse presentation of said at least one of audio and video (*See Id.* at p. 81 lines 1-26).

In an eleventh embodiment, as claimed in independent claim 104, a claimed method may include a first step of providing a preferences description that describes preferences of a user with respect to the use of the at least one of said audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); a second step of providing a media attribute of the preferences description describing the user's

preferences with respect to at least one of: (i) audio representation wherein the audio representation includes at least one of MP3, Liquid Audio, Real Audio, AC-3, stereo, and Dolby digital; and (ii) video representation wherein the video representation includes letterbox screen and 4:3 aspect ratio screen; and a third step of providing a content attribute describing the semantic content of the at least one of the audio and the video, where the content attribute is used with the media attribute to implement the user's preferences with respect to the at least one of the audio representation and the video representation(*See Id.* at p. 77 line 31 to p. 79 line 3; *Id.* at p. 68 line 33 to p. 69 line 31; *see also Id.* at p. 59 line 31 to p. 60 line 26; *Id.* at p. 62 lines 5-10; *Id.* at p. 66 lines 26-36).

In a twelfth embodiment, as exemplified by independent claim 108, a claimed method may comprise a first step of providing a preferences description on a storage medium detachably insertable into a multimedia device, where the preferences description describes preferences of a user with respect to the use of the at least one of said audio and video, and where the description includes multiple attributes (*See, e.g.* Specification at p. 10 line 8 to p. 11 line 29; *Id.* at p. 16 line 23 to p. 17 line 6; *Id.* at p. 40 line 13 to p. 45 line 27; *Id.* at p. 55 line 5 to p. 56 line 15); and a second step of providing a creation attribute of the preferences description describing the creation date of said at least one of audio and video (*See, e.g., Id.* at p. 86 lines 13-30).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection presented for review are: (1) whether claims 2, 3, 5-10, 12-26, 27-57, and 94-107 are unpatentable under 35 U.S.C. §103(a) over Sahai et al., U.S. Patent No. 6,594,699 (hereinafter Sahai) in view of Rangan et al., U.S. Patent No. 6,066,265(hereinafter

Rangan); (2) whether claims 61-72 are unpatentable under 35 U.S.C. §103(a) as being unpatentable over Sahai in view of Rangan, and in further view of Fano, U.S. Patent No.6,317,718; (3) whether 73-93 are unpatentable under 35 U.S.C. §103(a) as being unpatentable over Sahai in view of Rangan and in further view of Barrett et al., U.S. Patent No. 6,611,876 (hereinafter Barrett); (4) whether claims 108-118 are unpatentable under 35 U.S.C. §103(a) over Sahai in view of Rangan and in further view of Kanevsky et al., U.S. Patent No. 6,426,761 (hereinafter Kanevsky); and (5) whether claims 113-177 are unpatentable under 35 U.S.C. § 103(a) over Sahai in view of Rangan, and in further view of Kanevsky and Gabbe et al., U.S. Patent No. 5,550,965 (hereinafter Gabbe).

ARGUMENT

GROUP I (Claims 2, 3, 5-10, 12-56, 89-93, and 104)

The Examiner rejected the claims of Group I as being unpatentable under 35 U.S.C. § 103(a) as being obvious in view of various combinations involving Sahai and Rangan. Independent claim 2, from which dependent claims 3, 5-10, and 12-20 depend, includes the limitations of “receiving a media attribute . . . describing the quality of encoding said at least one of audio, image, and video wherein said quality of encoding includes a first quality and a second quality” and “selecting either said first quality and said second quality based upon the type of semantic content of said at least one of said audio and video.” Sahai discloses a system for streaming video-on-demand content to a user, at the request of the user. To provide for the receipt of the content by users across transmission routes of varying bandwidth, Sahai discloses that the video on demand content may be selectively provided at several qualities so that those users with restricted bandwidth may receive a lower quality signal while those users with high

bandwidth may receive a higher quality signal. In order to distinguish among such users, Sahai discloses that the system server may test the capabilities of the user's hardware, e.g. CPU speed, operating system, memory, etc. Sahai also discloses that the server may note the specific content quality requested by the user, presumably so that a higher quality signal than that requested by a user will not be provided, even where the user's system can handle the additional bandwidth. Though Sahai contemplates providing video content at a selected one of a plurality of encoding qualities, Sahai does not disclose that the quality be selected "based upon the type of semantic content of at least one of said audio and video."

Rangan, conversely, discloses that video may be provided to a user with hyperlinks so that a user may navigate between videos or other content stored or transmitted live by a service provider. The system of Rangan specifically contemplates that (1) hyperlinks to advertisements may be displayed to a user on "hotspots" on a user interface so that a user may activate the hyperlink to navigate among videos/advertisements; and (2) thumbnails of frames of the video, taken at scene changes, may be displayed so that a user, by activating the thumbnail, may begin recording a video segment at a time point prior to activation, i.e. a user may start recording a live segment even though the segment has already played. To these ends, Rangan discloses that hyperlinks to advertisements or other content, or thumbnail images representative of scene changes, presented on a screen to a user, may be customized to the semantic content shown. As a specific example, cited by the Examiner, Rangan states that during the sports segment of a live local television broadcast, an appropriate set of hyperlinks may be inserted at scene changes in the video stream, such as links to additional baseball, football, basketball and hockey content. *See Rangan at col. 27 lines 4-20.* Aside from the insertion of hyperlinks to advertisements tailored to the semantic content of the video, Rangan discloses no other relationship between the

features of the disclosed system and the meaning of the content, i.e. semantic content, being delivered to the user. Thus, at best, Rangan discloses tailoring the hyperlinked advertisements or other videos to the semantic content of the video segments being contemporaneously streamed to the user.

The Examiner has not shown, or even alleged, that the combination of Sahai and Rangan discloses the claimed limitation of “selecting either said first quality and said second quality based upon the type of semantic content of said at least one of said audio and video.” That Sahai discloses selecting a first or second quality of encoding based on the system capabilities of a user and/or the actual request of a user and that Rangan discloses selecting a presented advertisement or other hyperlinked video based on the semantic content of a provided video segment does not logically imply that the combination discloses selecting the *encoding quality* of Sahai based on the semantic content of Rangan. Stated more generically, if the first reference discloses making choice X (encoding quality) based on Y (user preferred quality/user system capabilities) and the second reference discloses making choice Z (hyperlink presentation selection) based on W (semantic content), the combination *does not* suggest making choice X (encoding quality) based on W (semantic content), which is the claimed limitation. To the contrary, the applicant does not believe that Rangan teaches anything that would be useful to the system of Sahai when determining the *encoding quality* at which to stream to the user.

Nor has the Examiner actually alleged that the combination teaches the limitation claimed by the applicant. In the most previous office action dated July 3, 2006, the Examiner attempts to respond to the foregoing arguments by asserting that Rangan “discloses monitoring [a] client’s interaction or selection to a streaming video including scene changes in the video to customize[] video and audio to the clients, based on the interaction or selection (see col. 14 lines 16-58, col.

17 lines 43-63, col. 23 lines 16-20 col. 30 line 49-col. 31 line 1+).” This response misses applicant’s argument entirely; the portions of Rangan cited by the Examiner merely disclose the presentation of selected advertisements to a user based on the genre or other semantic type of content viewed. Thus, the Examiner has failed to realize that the rejection is missing a required logical step – explaining why one of ordinary skill in the art would combine Sahai’s teaching to deliver content at a specific recording quality based on measured system capabilities and Rangan’s teaching to deliver targeted advertisements based on the semantic type of program watched, to arrive at a limitation of delivering content at a specific recording quality based on the type of semantic content being watched. In no office action, has the Examiner attempted to provide such an explanation. Instead, the Examiner pretends as if the mere citation to disparate elements in the prior art combination automatically renders obvious any claimed functional relationship between those prior art elements. Obviously, this assumption is incorrect.

At best, The Examiner seems to be arguing that, in view of the two cited references, it would have been obvious to *modify Rangan* to provide its content at various qualities *as taught by Sahai*, including hyperlinked video tailored to the semantic content of the scenes being streamed. This allegation is irrelevant. The mere fact that assorted segments of streamed video are in some fashion hyperlinked to each other based upon the respective semantic content of the segments, where the streamed video may be provided at various qualities depending the system specification of a user and/or the user’s request is not the same as selecting the quality of the streamed video based upon the semantic content of the video.

Therefore, the cited references, even in combination do not disclose the claimed limitation of “selecting either said first quality and said second quality based upon the type of semantic

content of said at least one of said audio and video.” Accordingly, the Examiner’s rejection of claim 2, as well as its dependent claims 3, 5-10, and 12-20 should be reversed.

Independent claim 21 includes the limitation of “said system selectively encoding at one of a plurality of different qualities said received broadcast of said at least one of said audio and video for storage on said storage device based upon the semantic content of said at least one of said audio and video.” Therefore, independent claim 21, as well as its dependent claims 22-30, distinguishes over the cited combination for the same reasons as does independent claim 2, i.e. the cited combination would not use the semantic content of a video to determine the quality at which the video is encoded. The applicant again notes that the Examiner merely alleges that the combination would “provide techniques for semantic or scene changes compression of video data at dynamically changing rates, for accessibility to a wide variety of client devices or platforms and connections, including where the client’s capacities are limited.” This is not what is claimed in the limitation recited above. Therefore the applicant respectfully requests that the Examiner withdraw the rejection of claims 21-30.

Similarly, independent claims 31, 38, 49, 89, and 104 each respectively include similar limitations, e.g. “selecting one of said first or second qualities” (claim 31) or “providing a storage attribute of said preferences description describing the quality of encoding of said at least one of said audio and video” (claims 38 and 49), “based upon the semantic content” of the audio and/or video. Therefore, each of claims 31-49, 89-93 and 104 are distinguished over the cited references for the same reasons as in independent claim 2, and the applicant respectfully requests that the rejection of these claims be reversed.

GROUP II (Claims 57-60)

Independent claim 57 includes the limitation of “providing a storage attribute of said preferences description describing the quality of encoding of said at least one of said audio and video based upon an agent of said system that selects either a first quality and a second quality based upon prior selections of said either said first quality and said second quality.” The Examiner contends that this limitation is disclosed by Sahai, at col. 5 to col. 6. The Examiner’s assertion is incorrect. These passages merely disclose selecting an appropriate bit rate to deliver to a client based upon either the capabilities of the system (i.e. not based upon prior selections of encoding quality) or user-specified parameters (in which an agent “of the system” would not be the actor creating the encoding quality in the preferences description based on past selections of the user, because in this prior art variation, the user sets the encoding quality in the preference description directly). Therefore, the applicant respectfully requests that the Examiner’s rejection of the claims of Group II be reversed.

GROUP III (Claims 61-79 and 108-114)

The Examiner rejected claims 61-72 under 35 U.S.C. § 103(a) as being obvious in view of the combination of Sahai and Rangan with Fano, U.S. Patent No. 6,317,718. The Examiner’s rejection is based on an improper reading of the claim limitations of “a storage medium selectively detachably insertable into a recording device suitable to record at least one of an audio and a video comprising a plurality of frames, said storage medium storing information comprising . . . a preferences description . . . where said description includes multiple attributes, . . . a time attribute of said preferences description” wherein “said storage medium interacts with said recording device when inserted” The Examiner appears to be reading the terms “selectively detachably insertable” upon any computing device having storage, irrespective of whether the storage is intended to be selectively removeable, i.e. a VCR, laptop, etc. This is

critical, because the prior art references merely disclose storing preference descriptions/attributes on the hardware device and disclose no need to remove the storage from the remaining hardware.

Although claim limitations are to be accorded their broadest reasonable meaning, claim limitations must be given some meaning. Under the examiner's reading, any storage would be selectively, detachably insertable into a recording device, depriving that limitation of all meaning. The applicant particularly notes that the further limitation of interaction between the recording device and the storage "when inserted" requires a functional mobility of the storage and the recording device during use of the recording device – a feature not disclosed in the prior art. The applicant therefore respectfully requests that the rejection of these claims be reversed.

Similarly, the Examiner's rejection of claims 73-79 and 108-114 in view of the combination of Sahai, Rangan, and Barrett (U.S. Patent No. 6,616,876), and Sahai, Rangan, and Kanevsky (U.S. Patent No. 6,426,761), respectively, are improper, because these claims respectively include one of the limitations of "detachably inserting a storage medium into a multimedia device, said storage medium storing a preferences description" (independent claim 73) and "providing a preferences description on a storage medium detachably insertable into a multimedia device, said preferences description describing preferences of a user with respect to the use of said at least one of said audio and video" (independent claim 108). The applicant therefore respectfully requests that the rejection of these claims also be reversed.

GROUP IV (Claims 94-103)

Independent claim 94 includes the limitations of "providing a preferences description, describing preferences of a user" and "providing a mode attribute of said preferences description describing the user's *preferences with respect to at least one of: (i) a user-selected forward*

speed at which the system provides a fast forward presentation of said at least one of audio and video; and (ii) a user-selected reverse speed at which the system provides a fast reverse presentation of said at least one of audio and video.” The cited combination does not disclose this emphasized limitation. The Examiner asserts that that claim 94 contains the same structural elements as previously discussed in the rejection of claim 31. When rejecting claim 31, however, the Examiner merely stated that claim 31 contains the same structural elements as previously discussed in the rejection of claim 2. Hence the Examiner’s rejection is facially insufficient. The applicant further notes that Sahai discloses nothing about a mode attribute containing a user’s preferences for either a user-selected fast forward or reverse speed. Similarly, though Rangan discloses a VOW VCR to record streamed and hyperlinked video segments, where the VOW VCR has the same functionality as existing VCRs, and thus allows fast-forwarding and rewinding of recorded content, nothing in Rangan discloses the claimed *mode attribute having a user’s preference* with respect to either one of a fast forward speed or a reverse speed. This argument has been raised to the Examiner, but ignored. Again, in the same manner as the Examiner’s rejection of the claims of Group I, the Examiner assumes that it is sufficient to cite the element of VCR-like controls in the prior art, without any heed to the manner in which the claims describe the functional relationship between those controls and other elements. Specifically, and contrary to the Examiner’s assertion in the most recent office action, Rangan nowhere discloses monitoring a user’s preferences or other interaction with respect to FF/Rev controls, but instead merely discloses the existence of such controls in a presentation unit according to Rangan’s invention. Therefore, the applicant respectfully requests that the rejection of claims 94-103 be reversed.

CONCLUSION

The Examiner's respective rejections of claims 2, 3, 5-10, 12-79, 89-104, and 108-18 should be reversed, and the claims should be found patentable.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Kurt Rohlf', followed by a long horizontal flourish.

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CLAIMS APPENDIX

1 (canceled).

2. A method of providing at least one of an audio, an image, and a video comprising a plurality of frames to a user, said method comprising:

- (a) receiving a preferences description, describing preferences of a user with respect to the use of said at least one of said audio, image, and video, where said description includes multiple attributes;
- (b) receiving a media attribute of said preferences description describing the quality of encoding said at least one of audio, image, and video wherein said quality of encoding includes a first quality and a second quality, where said first quality is less than said second quality;
- (c) selecting either said first quality and said second quality based upon the type of semantic content of said at least one of said audio and video; and
- (d) providing to a user said at least one of said audio and video at the selected one of said first quality and said second quality.

3. The method of claim 2 wherein said at least one of audio, image, and video is at least one of said audio and video.

4 (canceled).

5. The method of claim 3 wherein encoding said at least one of said audio and video using said first quality results in the storage of said at least one of said audio and video in less bytes than encoding said at least one of said audio and video using said second quality.

6. The method of claim 5 wherein said encoding uses a digital compression technique.

7. The method of claim 5 further comprising selecting either said first quality and said second quality based upon available storage for said at least one of said audio and video.

8. The method of claim 7 wherein said selecting is automatically performed by said system.

9. The method of claim 7 wherein said selecting is prompted to a user of said system for selection.

10. The method of claim 5 further comprising:

- (a) at least one of viewing and listening to a portion of said at least one of said audio and video;
- (b) pausing said at least one of said viewing and listening to said portion;
- (c) storing said portion subsequent to the location that said portion was paused while said at least one of said viewing and listening is paused;
- (d) resuming said at least one of said viewing and listening of said portion at the location that said portion was paused; and
- (e) selecting either said first quality and said second quality for said storing of said portion subsequent.

11(canceled).

12. The method of claim 2 wherein sports programming of said type of content is automatically encoded at said second quality by said system.

13. The method of claim 2 wherein nature programming of said type of content is automatically encoded at said first quality by said system.

14. The method of claim 2 further comprising said system automatically selecting either said first quality and said second quality based upon other attributes of preferences description.

15. The method of claim 2 further comprising said system automatically selecting either said first quality and said second quality based upon attributes of a system preferences description.

16. The method of claim 2 where said semantic content comprises at least one of actors, stars, director, and rating.

17. The method of claim 2 further comprising said system automatically selecting either said first quality and said second quality based upon predefined relationships between a plurality of attributes of said preference descriptions.

18. The method of claim 17 further comprising said selecting based upon attributes of a program preference descriptions.

19. The method of claim 18 further comprising said selecting based upon attributes of a system preference descriptions.

20. The method of claim 2 further comprising an agent of said system that selects either said first quality and said second quality based upon prior selections of said either said first quality and said second quality.

21. A system for use with at least one of a broadcast of an audio and a video comprising a plurality of frames comprising:

- (a) said system receiving said broadcast of said at least one of audio and video;
- (b) said system including a storage device for said received broadcast of said at least one of audio and video; and

- (c) said system selectively encoding at one of a plurality of different qualities said received broadcast of said at least one of said audio and video for storage on said storage device based upon the semantic content of said at least one of said audio and video.

22. The system of claim 21 wherein said encoding includes a first quality that results in the storage of less bytes than encoding using a second quality.

23. The system of claim 22 further comprising selecting either said first quality and said second quality based upon available storage on said storage device.

24. The system of claim 23 wherein said selecting is automatically performed by said system.

25. The method of claim 23 wherein said selecting is prompted to a user of said system for selection.

26. The system of claim 22 further comprising:

- (a) storing said at least one of audio and video on said storage device while at least one of listening and viewing of said at least one of audio and video is paused; and
- (b) wherein said storing step (a) is selectable by said system.

27. The system of claim 22 where said semantic content comprises at least one of actors, stars, director, and rating.

28. The method of claim 22 further comprising said system automatically selecting either said first quality and said second quality based upon user preferences.

29. The system of claim 22 further comprising said system automatically selecting either said first quality and said second quality based upon said at least one of audio and video.

30. The system of claim 22 further comprising said system selecting either said first quality and said second quality based upon prior selections of said either said first quality and said second quality.

31. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) providing a storage attribute of said preferences description for a data storage device of a user audiovisual system describing first and second qualities of encoding of said at least one of audio and video while said system pauses at least one of listening and viewing of said audio and video; and
- (d) selecting one of said first and second qualities based on the semantic content of said at least one of an audio and a video.

32. The method of claim 31 further comprising storing said audio and video on said storage device while said system is paused.

33. The method of claim 32 further comprising resuming said at least one of listening and viewing.

34. The method of claim 33 wherein said step of encoding said at least one of said audio and video using said first quality results in the storage of said at least one of said audio and video in less bytes than encoding said at least one of said audio and video using said second quality.

35. The method of claim 34 further comprising the step of selecting either said first quality and said second quality based upon available storage for said at least one of said audio and video.

36. The method of claim 35 wherein said selecting step is automatically performed by said system.

37. The method of claim 35 further comprising the step of selecting from among said first quality, said second quality, and a third quality.

38. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) providing a storage attribute of said preferences description describing the quality of encoding of said at least one of audio and video based upon the semantic content of said at least one of audio and video.

39. The method of claim 38 further comprising selecting either a first quality and a second quality based upon the type of content of said at least one of said audio and video.

40. The method of claim 39 further comprising selecting from among said first quality, said second quality, and a third quality.

41. The method of claim 39 wherein sports programming of said content is automatically encoded at said second quality by said system.

42. The method of claim 41 wherein nature programming of said content is automatically encoded at said first quality by said system.

43. The method of claim 39 further comprising automatically selecting either said first quality and said second quality based upon attributes of said preferences description in addition to said content.

44. The method of claim 39 further comprising automatically selecting either said first quality and said second quality based upon predefined relationships between a plurality of attributes of said preference descriptions.

45. The method of claim 44 further comprising said selecting based upon attributes of a program preference descriptions.

46. The method of claim 44 further comprising said selecting based upon attributes of a system preference descriptions.

47. The method of claim 39 further comprising an agent of said system that selects either said first quality and said second quality based upon prior selections of said either said first quality and said second quality together with said content.

48. The method of claim 47 wherein said selecting is automatically performed by said system.

49. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) providing a storage attribute of said preferences description describing the quality of encoding of said at least one of audio and video based upon the semantic content of said audio and a video and upon the combination of at least one other attribute of said preferences description and said storage attribute.

50. The method of claim 49 further comprising selecting either a first quality and a second quality based upon the type of content of said at least one of said audio and video.

51. The method of claim 50 further comprising selecting from among said first quality, said second quality, and a third quality.

52. The method of claim 49 wherein one of said at least two other attributes of said preferences description includes a content attribute describing said at least one of audio and video.

53. The method of claim 49 further comprising said selecting based upon attributes of a program preference descriptions.

54. The method of claim 53 further comprising said selecting based upon at least one attribute of a system preference descriptions.

55. The method of claim 50 further comprising an agent of said system that selects either said first quality and said second quality based upon prior selections of said either said first quality and said second quality together with said at least two other attributes of said preferences description.

56. The method of claim 50 wherein said selecting is automatically performed by said system.

57. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) providing a storage attribute of said preferences description describing the quality of encoding of said at least one of audio and video based upon an agent of said system that selects either a first quality and a second quality based upon prior selections of said either said first quality and said second quality.

58. The method of claim 57 wherein said quality of encoding is further based upon at least two other attributes of said preferences description.

59. The method of claim 57 wherein said quality of encoding is further based upon the content of said at least one of audio and video.

60. The method of claim 57 wherein said selecting is automatically performed by said system.

61. A storage medium selectively detachably insertable into a recording device suitable to record at least one of an audio and a video comprising a plurality of frames, said storage medium storing information comprising:

- (a) a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) a time attribute of said preferences description describing at least one of:
 - (i) a first time to start obtaining said at least one of audio and video prior to the scheduled time of said at least one of audio and video; and
 - (ii) a second time to end obtaining said at least one of audio and video after the schedule time of said at least one of audio and video; and
- (c) wherein said storage medium interacts with said recording device when inserted in said storage medium to obtain said at least one of an audio and a video.

62. The method of claim 61 wherein said scheduled time is the time period of at least one of an audio program and a video program.

63. The method of claim 62 wherein said first time is selected based upon the content of said at least one of an audio program and a video program.

64. The method of claim 62 wherein said second time is selected based upon the content of said at least one of an audio program and a video program.

65. The method of claim 63 wherein said content is described in said preferences description.

66. The method of claim 64 wherein said content is described in said preferences description.

67. The method of claim 62 wherein said first time is selected based upon the type of said at least one of an audio program and a video program.

68. The method of claim 62 wherein said second time is selected based upon the type of said at least one of an audio program and a video program.

69. The method of claim 67 wherein said type is described in said preferences description.

70. The method of claim 68 wherein said type is described in said preferences description.

71. The method of claim 68 wherein said type includes sports programs.

72. The method of claim 68 wherein said type includes sitcoms.

73. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) detachably inserting a storage medium into a multimedia device, said storage medium storing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and

- (b) providing a layer attribute of said preferences description indicating the number of layers of supplemental data auxiliary to said at least one of said audio and video.

74. The method of claim 73 wherein said number of layers relates to at least one of HTML documents and XML documents.

75. The method of claim 73 further comprising retrieving said supplemental data prior to at least one of listening and viewing said at least one of audio and video.

76. The method of claim 75 wherein said number of layers is determined in accordance with the available storage for said supplemental data.

77. The method of claim 75 further comprising ceasing said retrieving of said supplemental data prior to retrieving all said number of layers.

78. The method of claim 73 further comprising said number of layers being determined in accordance with the available storage for said supplemental data.

79. The method of claim 78 wherein said available storage is determined by the user.

80-88(canceled).

89. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes;
- (b) providing at least one of:
 - (i) a content attribute of said preferences description related to the semantic content of said at least one of audio and video;

(ii) a type attribute of said preferences description related to the type of said at least one of audio and video; and

(c) determining the number of layers of supplemental data auxiliary to said at least one of said audio and video based at least in part upon said content attribute and said type attribute.

90. The method of claim 89 wherein said number of layers relates to at least one of HTML documents and XML documents.

91. The method of claim 89 further comprising retrieving said supplemental data prior to at least one of listening and viewing said at least one of audio and video.

92. The method of claim 89 wherein said number of layers is determined, at least in part, in accordance with the available storage for said supplemental data.

93. The method of claim 91 further comprising ceasing said retrieving of said supplemental data prior to retrieving all said number of layers.

94. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

(a) providing a preferences description, describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and

(b) providing a mode attribute of said preferences description describing the user's preferences with respect to at least one of:

(i) a user-selected forward speed at which the system provides a fast forward presentation of said at least one of audio and video; and

(ii) a user-selected reverse speed at which the system provides a fast reverse presentation of said at least one of audio and video.

95. The method of claim 94 wherein said mode attribute includes said forward speed.
96. The method of claim 94 wherein said mode attribute includes said reverse speed.
97. The method of claim 94 wherein said mode attribute includes said time interval.
98. The method of claim 95 wherein said forward speed is selected based upon, at least in part, other attributes of said preferences description.
99. The method of claim 96 wherein said reverse speed is selected based upon, at least in part, other attributes of said preferences description.
100. The method of claim 97 wherein said time interval is selected based upon, at least in part, other attributes of said preferences description.
101. The method of claim 95 wherein said forward speed is automatically determined by said system for one of said at least one of audio and video based upon, at least in part, said system monitoring previous selections of said forward speed for other respective said at least one of audio and video.
102. The method of claim 96 wherein said reverse speed is automatically determined by said system for one of said at least one of audio and video based upon, at least in part, said system monitoring previous selections of said reverse speed for other respective said at least one of audio and video.
103. The method of claim 97 wherein said time interval is automatically determined by said system for one of said at least one of audio and video based upon, at least in part, said system monitoring previous selections of said time interval for other respective said at least one of audio and video.
104. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes;
- (b) providing a media attribute of said preferences description describing the user's preferences with respect to at least one of:
 - (i) audio representation wherein said audio representation includes at least one of MP3, Liquid Audio, Real Audio, AC-3, stereo, and Dolby digital;
 - (ii) video representation wherein said video representation includes letterbox screen and 4:3 aspect ratio screen; and
- (c) providing a content attribute describing the semantic content of said at least one of said audio and said video, said content attribute being used with said media attribute to implement said user's preferences with respect to said at least one of said audio representation and said video representation.

105-107 (canceled).

108. A method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

- (a) providing a preferences description on a storage medium detachably insertable into a multimedia device, said preferences description describing preferences of a user with respect to the use of said at least one of said audio and video, where said description includes multiple attributes; and
- (b) providing a creation attribute of said preferences description describing the creation date of said at least one of audio and video.

109. The method of claim 108 wherein said creation date refers to the original creation date of said at least one of audio and video.

110. The method of claim 108 wherein said creation date refers to the re-mastering date of said at least one of audio and video.

111. The method of claim 108 wherein said creation date is used to select among a plurality of said at least one of audio and video programs.

112. The method of claim 111 wherein said selected programs are stored on a local storage.

113. The method of claim 112 wherein selection is further among a plurality of episodes of the same program.

114. The method of claim 113 wherein said selection is further limited to a desired number of episodes.

115. The method of claim 112 wherein a predetermined number of said selected program of a plurality of episodes are said stored on said local storage.

116. The method of claim 115 wherein a portion of said local storage is reserved for at least one of said plurality of episodes prior to said storing on said local storage.

117. The method of claim 113 wherein said creation attribute is used to select among said plurality of episodes of the same program.

118. The method of claim 108 wherein said creation date refers to a date period.

EVIDENCE APPENDIX:

None.

RELATED PROCEEDINGS APPENDIX:

None.